

AMENDMENTS TO THE CLAIMS

Claims 1, 3, and 8-13 have been amended, and new claims 16-23 have been added. A listing of the claims follows and replaces all prior listing of the claims.

LISTING OF THE CLAIMS

Claim 1 (Currently Amended): A fuel supplying apparatus for a fuel cell, comprising:
a fuel; and
a cross-linked membrane for encapsulating the fuel and isolating the fuel from a fuel solvent in the fuel cell,
wherein the cross-linked membrane is permeable only to the fuel.

Claim 2 (Original): The fuel supplying apparatus of claim 1, wherein the fuel is methanol.

Claim 3 (Currently amended): The fuel supplying apparatus of claim 1, wherein the fuel and the cross-linked membrane are formed to have ~~has~~ a gel-like structure.

Claims 4-7 (Cancelled).

Claim 8 (Currently amended): The fuel supplying apparatus of claim 1, wherein the cross-linked membrane is a single-layered cross-linked membrane allowing the fuel to permeate in one direction.

Claim 9 (Currently amended): The fuel supplying apparatus of claim 8 ~~8~~ ^{[[1]]}, wherein the single-layered cross-linked membrane is selected from ~~the~~ ^{[[a]]} group consisting of

polyvinyl acetate, oligomers and copolymers of vinyl pyrrolidone, and polytetrafluoroethylene.

Claim 10 (Currently amended): The fuel supplying apparatus of claim 8 [[1]], ~~wherein the membrane further comprising~~ comprises a second cross-linked membrane formed on an outer layer of the single-layered cross-linked membrane to be permeable only to the fuel under certain circumstances so as to form a multi-layered complex membrane.

Claim 11 (Currently amended: The fuel supplying apparatus of claim 10 [[1]], further comprising a porous substrate [[is]] provided between the single-layered cross-linked membrane and the second cross-linked membrane.

Claim 12 (Currently amended): The fuel supplying apparatus of claim 10 [[1]], wherein the second cross-linked membrane is ~~a cross-linked membrane~~ made of polyvinyl alcohol.

Claim 13 (Currently amended): The fuel supplying apparatus of claim 10 [[1]], ~~wherein the fuel comprises methanol, and~~ wherein the second cross-linked membrane is moistened so as to be permeable to the methanol.

Claims 14 and 15 (Cancelled).

Claim 16 (New): A fuel supplying apparatus for a fuel cell, comprising:
a fuel; and
a cross-linked membrane for encapsulating the fuel and isolating the fuel from a fuel solvent in the fuel cell,
wherein the cross-linked membrane is permeable only to the fuel, and

wherein the fuel and the cross-linked membrane are formed to have a gel-like structure.

Claim 17 (New): The fuel supplying apparatus of claim 16, wherein the fuel is methanol.

Claim 18 (New): The fuel supplying apparatus of claim 16, wherein the cross-linked membrane is a single-layered cross-linked membrane allowing the fuel to permeate in one direction.

Claim 19 (New): The fuel supplying apparatus of claim 18, wherein the single-layered cross-linked membrane is selected from [[a]] the group consisting of polyvinyl acetate, oligomers and copolymers of vinyl pyrrolidone, and polytetrafluoroethylene.

Claim 20 (New): The fuel supplying apparatus of claim 18, further comprising a second cross-linked membrane formed on an outer layer of the single-layered cross-linked membrane to be permeable only to the fuel under certain circumstances so as to form a multi-layered complex membrane.

Claim 21 (New): The fuel supplying apparatus of claim 20, further comprising a porous substrate provided between the single-layered cross-linked membrane and the second cross-linked membrane.

Claim 22 (New): The fuel supplying apparatus of claim 20, wherein the second cross-linked membrane is made of polyvinyl alcohol.

Claim 23 (New): The fuel supplying apparatus of claim 20, wherein the fuel comprises methanol, and wherein the second cross-linked membrane is moistened so as to be permeable to the methanol.